Project: 21_5837_06_15
Site: 6 Chantry Walk, Wirral, CH60 8PX
Client: Mark Lawrie

Document Title:	Tree Survey
Document Author:	Ffion Maguire
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BS5837: 2012	Planning Only	N/A

Report no: 21_5837_06_15

Date: 17th June 2021

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Summary:

This is a BS5837 compliant arboricultural assessment report providing detailed and sufficient information for the Local Planning Authority to be able to consider the effect of the proposed development on local character and amenity from a tree perspective.

Our brief has been to obtain details of the tree population on-site with a view to assessing any arboricultural constraints.

This report was commissioned in relation to the proposed development at 6 Chantry Walk, Wirral, CH60 8PX.

The report details all trees over 75mm at 1.5m above ground level that are relevant to the siting of the proposed development. The position of the trees on the site is illustrated on the tree constraints plan and information about the tree stock and its current condition is given within the arboricultural data tables.

It will assist the planning process by discussing the impact that the proposals will have on the existing tree stock.

Any new development should be designed to avoid the crown and Root Protection Areas of trees.

Where construction within the RPA of trees is unavoidable, suitable mitigation measures should be considered, for example, special engineering methods.

Report Author.

ROAVR Environmental (ROAVR Group)was formed in 2010 and since then has carried out arboricultural consultancy Nationwide with directly employed consultants. Our consultants are all individual members of the Arboricultural Association and the report author is listed in the document control sheet.

Validation Statement for the Local Planning Authority.

This report includes the following for LPA validation purposes:

- A **tree survey and tree constraints plan** showing the existing trees, their category rating and above and below ground constraints shown on an OS extract OR a topographical survey
- An **appendices** highlighting tree related information including the **arboricultural data tables**

Table of Contents

Tree Survey & Arboricultural Impact Assessment to BS 5837 2012 of trees at: 6 Chantry Walk, Wirral, CH60 8PX.

1 Scope

1.1 We have recently been instructed to undertake an appraisal of mature tree cover at 6 Chantry Walk, Wirral, CH60 8PX.

1.2 The data was collected to the British Standard BS5837 'Trees in Relation to Design, Demolition and Construction - Recommendations' 2012.

1.3 The survey has been commissioned to offer guidance on the arboricultural constraints with a view to the future development of the site.

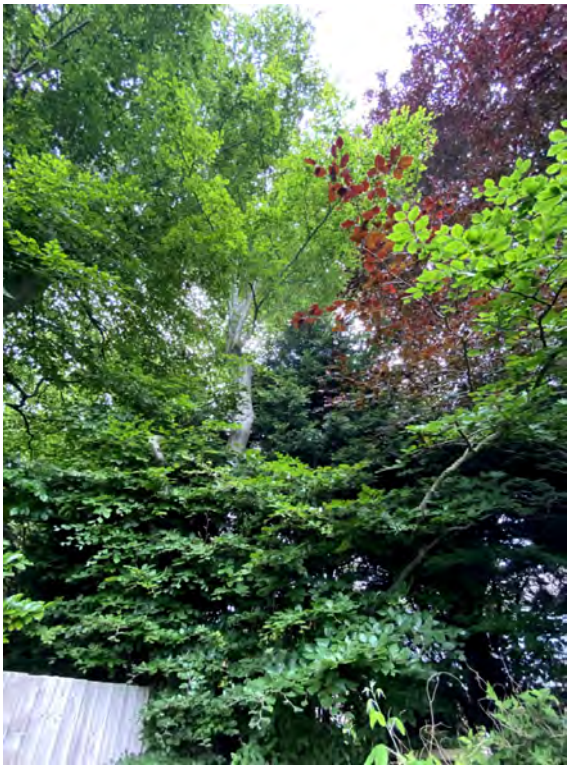
1.4 The trees were inspected on the 10/06/2021 following the guidance in the British Standard by ROAVR. The crowns and stems were inspected from the ground using the 'Visual Tree Assessment (VTA)' method; non invasive techniques were used at this stage. Although a sounding hammer was used to determine the presence of any decay.

1.5 The site was assessed and data was collected on all woody vegetation falling within the scope of the British Standard. Trees were grouped or designated woodlands as per the allowance in the British Standard when the area in question was uniform in terms of species, age or geography.

Photographic Plates.

Photographic plate showing tree T1, a mature Common Oak.

Photographic plate showing a linear feature of Beech trees, situated on the site's eastern boundary.



Photographic plate showing trees T9 and T10, situated offsite, on the southeast corner of the site.

Photographic plate showing trees T11, T12, T13 and T14, situated offsite.

Photographic plate showing tree T15, a mature Black Poplar.

Photographic plate showing tree T16, a mature Scots Pine.

Photographic plate showing a linear feature of trees situated offsite, on the site's southern boundary.

Photographic plate showing a linear feature of trees running along the site's southern boundary.

Photographic plate showing hedgerow H1, comprised of young Leyland Cypress.

Photographic plate showing tree T26, a semi-mature Silver Birch.

Photographic plate showing hedgerow H3, which runs along the driveway.

Photographic plate showing tree T27, a semi-mature Wild Cherry.

Photographic plate showing an aerial image of the survey site.

Photographic plate showing an aerial image of the survey site.

Photographic plate showing an aerial image of the survey site.

2. Site Conditions & Site Surroundings

2.1 The site is situated in Wirral in the Wirral Council control area. The site is located on the south side of the borough and has a suburban feel.

2.2 The site is home to a detached residential dwelling house with associated hard and soft landscape.

2.3 The wider locality is predominantly residential. The site is accessed via a private driveway, off from the adjacent public highway.

2.4 A desktop assessment has highlighted that the site is not within a Conservation Area. However, there is a TPO protected area towards the rear of the site.

2.5 All desktop assessment data was cross-checked and validated on the 14/06/2021 using the web portal provided by the local planning authority.

https://www.wirral.gov.uk/planning-and-building/tree-preservation/tree-preservation-orders#wgSM-0

Image plate showing the desktop analysis results of the surveyed plot.

2.6 Works to protected trees require consent from the local planning authority. In the case of TPO's an application must be made. In the case of conservation areas a notification must be made. TPO applications take up to eight weeks, conservation area notifications take six weeks.

2.7 Certain exemptions apply; for example the removal of deadwood. In the case of dangerous trees 5-days written notice should be given to the local authority (in the cases of immediate danger the work should proceed, but the local authority contacted as soon as possible afterwards) with the works evidenced by photographs and video where possible. You should also check to ensure the works are exempt from the requirements of a felling licence.

2.8 It should be noted that planning consent overrides protected trees, where the works or removal are necessary for development to proceed and have been highlighted in the tree survey documents.

2.9 Bats. Under current legislation it is an offence to 'intentionally or recklessly disturb a bat' or 'damage, destroy or block access to the resting place of any bat'. For further details consultation must be made with the Statutory Nature Conservancy Organisation. Where relevant any current ecological surveys for the site will take precedence in this matter.

2.10 Birds. It is an offence to kill, injure or take any wild bird; or take, damage or destroy the nest of any wild bird while it is in use or being built. Therefore work likely to disturb nesting birds must be avoided from late March to August.

3. Drawings

3.1 Appended to this report is the tree constraints plan.

3.2 The tree constraints plan has been produced using an OS supplied .dwg (AutoCAD) base plan as no topographical survey was available. Tree positions and data have been applied using our survey handset as an onsite exercise with the constraints plan being produced as a PDF through Auto CAD.

3.3 An autoCAD .dwg file of the tree constraints is available on request for project stakeholders to utilise.

3.4 The *Tree Constraints Plan* shows the existing layout. For each tree the stem location is indicated and scaled according to its diameter, the canopy is indicated according to measurements taken along the four cardinal points of the compass. Root protection areas (RPAs) are indicated which are calculated according to the guidelines within BS 5837 (2012).

3.5 Where appropriate, the shapes of the RPAs have been amended to reflect actual site conditions or where trees have been heavily pruned. The 'original' RPAs are indicated as a dashed line whereas the amended RPAs are indicated as a solid line. Any variation to this approach will be highlighted on the appropriate plans.

4. The Tree Population

4.1 BS5837: 2012 Tree Categorisation:

BS5837: 2012 sets out the methodology for surveying trees on potential development sites in order to identify them within a prioritised system of retention categories, as summarised below and given in full within the BS5837: 2012 Cascade Chart for Tree Retention.

A Category Trees of high quality and value in such a condition as to be able to make a substantial contribution for a minimum of 40 years.

B Category Trees of moderate quality and value in such a condition as to make a significant contribution for a minimum of 20 years.

C Category Trees of low quality and value currently in adequate condition to remain until new planting could be established and expected to remain for a minimum of 10 years, or young trees with a stem diameter less than 150mm measured at 1.5 meters above ground level.

U Category Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural or forestry management.

4.2 Additionally, BS5837: 2012 provides subcategories 1-3 within the category system outlined above which indicate the area(s) in which a tree or group retention value lies. An explanation of these values is given within the BS5837: 2012 Cascade Chart for Tree Retention.

1 - Retention values that are mainly arboricultural
2 - Retention values that are mainly landscape.
3 - Retention values that are mainly cultural, including conservation.

4.3 In line with BS5837: 2012, A and B category trees should be considered as a constraint on site and provide a substantial contribution to the site. As a result, A and B category trees should be retained and incorporated into the scheme where possible.

4.4 Generally C and U category trees are considered to be of low quality or are young specimens that can be readily replaced and therefore should not be a constraint in terms of future development.

4.5 However, it is generally considered desirable to retain trees wherever reasonably possible to ensure continuity of tree cover and to provide a mature landscape to the development.

4.6 The survey contains details of a number of trees. The comments including species, age, condition and the BS5837:2012 retention category for each individual tree and group of trees are provided in detail in the Tree Schedule (data tables). The full data collection methodology is appended behind the data tables.

4.7 The location of each individual tree and their associated constraints are illustrated on the appended Tree Constraints Plan.

Preliminary Management Recommendations - Regardless of the proposals.

4.8 Management recommendations within the appended data tables are regardless of any new developments.

Future Management Recommendations - Regardless of the proposals.

4.9 Trees should be inspected every three years.

4.10 The trees should be inspected sooner if there is a noticeable decline in their condition, or following extreme weather events.

5. Trees & Construction - General Issues

5.1 This report has been prepared to inform the design layout of potential development and should be submitted with a planning application.

5.2 Due to the changing nature of trees and other site circumstances this report and recommendations are limited to a one year period. Similarly, this report could be invalidated if any alterations are made to the site that could change the conditions as seen at the time of inspection.

5.3 Under certain circumstances, roots can affect foundations, drains and other underground services. These issues have not been addressed by this report. Trees are dynamic structures that can never be guaranteed 100% safe; even those in good condition can suffer occasional damage under only average weather conditions. A lack of recommended work does not imply that a tree will never suffer damage.

5.4 Typically, about 80% of roots will be found in the upper 500mm of soil and often extending well beyond the canopy spread. The threat to the trees by development comes from:

A. root severance or fracture
B. compaction of the soil, preventing gaseous exchange and moisture percolation
C. possible change to moisture gradients due to surface water run-off or interception
D. physical damage to low branches and trunk.
E. damage from chemical run-off from construction activities

The consequences for the tree of such damage are:

A. instability, if severe enough
B. entry points for pathogenic fungi at wounds / fractures
C. loss of vitality due to reduced oxygen, mineral and moisture take-up; all leading to root death, and a general decline or possible death of the tree.

5.5 Within a short distance of the stem, the roots of trees are highly branched, so as to form a network of small-diameter woody roots, which can extend radially for a distance much greater than the height of the tree, except where impeded by unfavourable conditions.

5.6 All parts of this system bear a mass of fine, non-woody absorptive roots, typically concentrated within the uppermost 600mm of the soil. The root system tends to develop sufficient volume and area to provide physical stability.

5.7 The uptake of water and mineral nutrients by the root system takes place via the fine non-woody roots and associated beneficial fungi. Their survival and functioning, which are essential for the health of the tree as a whole, depend on the maintenance of favourable soil conditions. All parts of the root system, but especially the fine roots, are vulnerable to damage.

5.8 BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations' gives information on determining a root protection area (RPA). This is the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

5.9 The default position should be that structures (section 3.10 of BS5837) are located outside the RPAs of trees to be retained. However, If structures (including hard surfacing) are proposed within the root protection area of a retained tree it will require an overriding justification (5.3.1 of BS5837). The project arboriculturist needs to demonstrate that the trees can remain viable, the area lost to encroachment can be compensated for elsewhere contiguous with the RPA and mitigation measures to improve the soil environment of the tree can be implemented.

6. Tree Constraints - Information

6.1 Constraints imposed by trees during development, both above and below ground need to be considered within the site layout design. Protection is afforded to the tree by defining a Root Protection Area (RPA) within which no development activity should take place. The size of the RPA is defined in the British Standard and relates to trunk diameter. The RPA is normally the minimum position for placement of tree protective fencing. The data tables hold a column figure as an offset in meters from the stem that the root protection area extends to.

6.2 Nominally the RPA is represented by a circle around the tree. The area of the RPA may, however, subject to the consideration of the arboricultural consultant, and be altered to a polygon in order to reflect the site conditions and requirements. For example, existing hard surfaces and foundations are likely to restrict or limit root growth while good quality soil may promote and extend root growth.

6.3 Root Protection Areas primarily relate to below ground constraints (root protection). Other constraints that must be considered include:

- The current as well as ultimate height and spread of a tree
- Large trees close to a building, particularly a dwelling, can cause apprehension to owners/occupiers that result in pressure for tree removal or inappropriate pruning.
- Buildings should be sited allowing for the species height, spread and overall habit
- Species characteristics; i.e. density of foliage, fruit-fall, susceptibility to honeydew drip, or branch drop. Trees are shedding organisms. The leaves of some species may cause problems with blocking of gullies and gutters. Fruit may cause slippery patches and honeydew drop can affect surfaces (particularly cars). If conflicts may arise, detailed design may address such issues, such as non-slip paths, use of car-ports, provision of leaf guards or grilles etc.
- The potential impact on direct and diffuse light of a particular location of land; shading of buildings by trees can be a problem, especially where rooms require natural light, in addition, open spaces such as gardens and sitting areas should be designed to meet requirements for direct sunlight (for at least part of the day)
- Infrastructure requirements in relation to trees e.g. easements for underground or above ground apparatus and visibility splays
- Space for the provision of new planting or landscaping
- The proposed end use of space within Root Protection Areas
- The requirement to protect overhanging canopies of trees that overhang or extend beyond Root Protection Areas

7. Structures within the RPA of trees - Information

7.1 In the development layout design structures should be positioned outside of RPAs as far as practicable (5.9). In some exceptional instances, there may be an overriding justification for construction within the RPA. In such cases, technical solutions may be available to minimise to an acceptable level of disturbance to the tree or trees. Where such technical solutions may be relied upon full details will need to be included within a method statement. Advice must be sought from a suitably qualified arboriculturalist to develop a solution.

7.2 In some cases it may be unavoidable to place permanent hard surfacing within an RPA (for example the placement of an access driveway or parking area). In such cases, the following should apply:

- No excavation of the soil should take place, other than scraping of the turf/ vegetation layer
- Any design must avoid compaction, allowing an even distribution of weight
- New hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA
  If the proposed surface is likely to require de-icing salt then run-off should be directed away from the RPA
- Permeable hard surfacing can result in soil moisture saturation for long periods (resulting in root death). Where there is a risk of water-logging a design should incorporate land drainage

7.3 Appropriate sub-base options for new hard surfacing include three-dimensional cellular confinement systems (cell-web). Piles, pads or elevated beams can support bridges over RPAs. In all cases, full specifications and methodology must be included within a supporting method statement.

Appendix: BS 5837: 2012 – Guidance Notes

This Standard prescribes the principles to be applied to achieve a satisfactory juxtaposition of trees and structures. It sets out to assist those concerned with trees in relation to design, demolition and construction to form balanced judgements.

It acknowledges the positive contribution trees may offer to a site, as well as the negative aspects of retaining inappropriate trees. It addresses the negative impacts that construction activity may have upon trees and offers mitigation strategies to minimise these impacts.

The Standard suggests a three stage approach to ensure best practice is followed when developing close to trees:

Stage 1: Survey Details and Notes

A ground level visual survey was undertaken. No climbed inspections or specialist decay detection were undertaken. Only trees with a stem diameter over 75mm, which lie within the site boundary or relatively close to it, were included.

Where applicable, trees with significant defects have been highlighted and appropriate remedial works have been recommended. However, this report should not be seen as a substitute for a full Safety Survey or Management Plan which are specifically designed to minimise risk and liability associated with responsibility for trees.

Wherever practicable dimensions were obtained using diameter tapes, logger's tapes, distometers and clinometers. Where obstacles prevent accurate measurement, dimensions are estimated. Trees on privately owned third parties are surveyed from the best available vantage point and observations relating to the condition of these trees should be treated accordingly. All height measurements should be regarded as approximate.

Appendix: Survey Methodology

Ground level visual surveys are carried out using the Visual Tree Assessment technique described by Mattheck and Broeler (1994) and endorsed by the Arboricultural Association (LANTRA Professional Tree Inspection course, 2007).

Structural condition is assessed by inspecting the stem and scaffold branches from all angles looking for weak branch junctions or symptoms of decay. Particular attention is paid to the stem- base. Cavities are explored using a metal probe in order to assess the extent of any decay. If this is not possible further inspection is recommended in the form of a climbed inspection or using specialist decay detection equipment.

The physiological condition is assessed by inspecting the stem, branches and foliage for symptoms of disease. The overall vigour of the tree is also taken into account.

Where significant defects are observed, recommendations are made according to a scale of priority in order to reduce the likelihood of structural failure. The position of the tree and its potential targets are taken into account.

Measurements are obtained using a diameter tape, clinometer, distometer and loggers tape.

Where this is not practical measurements are estimated.

Some trees are surveyed as groups, though this is usually avoided close to areas likely to be developed.

8. Limitations

8.1 ROAVR Environmental has prepared this Report for the sole use of the above named Client/Agent in accordance with our terms of business, under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us.

8.2 This Report may not be relied upon by any other party without the prior and express written agreement of ROAVR Environmental. The assessments made assume that the land use will continue for their current purpose without significant change. ROAVR Environmental has not independently verified information obtained from third parties.

8.3 This report, video walkthrough, data tables and raw data remain the copyright of ROAVR until such time as any monies owed are settled in full and the report may be withdrawn at any time.

Should you require any further information, please do not hesitate to contact us at any time.

Mr. M Harmsworth tech.arbor.a, DipRS
Consultant Arborist

Matt Harmsworth

Prepared by: Ffion Maguire.
Checked by: Matt Harmsworth.

Appendix 1 – Site Location

Image plate showing satellite mapping of the surveyed plot and surrounding area.

Appendix 2 – Arboricultural Data Tables

Tree ID	Common Name	Latin Name	Maturity	Measurements Estimated	Height (m)	Height and direction of first significant branch (m)	Number of Stems	Diameter at Breast Height	Stem 2 (mm)	Spread - N (m)	Spread - E (m)	Spread - S (m)	Spread - W (m)	Canopy Height (m)	Crown Condition	Stem Condition	Basal Condition	Category	Life Expectancy	Subcategories	Phys Condition	Management Recommendations	Comment
T1	Common Oak	Quercus robur	Mature	Yes	11	S-1	2	600	300	6	6	6	6	3	Good	Good	Fair	A	>40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Remove epicormic growth.	Situated offsite, epicormic growth on stem, mechanical damage.
T2	Common Beech	Fagus sylvatica	Mature	Yes	12	N-2	1	350	N/A	4	4	4	4	3.7	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Part of a linear feature of 8 Beech trees acting as a hedge row, branches encroaching over boundary line and building.
T3	Common Beech	Fagus sylvatica	Mature	Yes	12	N-2	1	310	N/A	4	4	4	4	3.7	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Part of a linear feature of 8 Beech trees acting as a hedge row, branches encroaching over boundary line and building.
T4	Common Beech	Fagus sylvatica	Mature	Yes	12	N-2	1	300	N/A	4	4	4	4	3.7	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Part of a linear feature of 8 Beech trees acting as a hedge row, branches encroaching over boundary line and building.
T5	Common Beech	Fagus sylvatica	Mature	Yes	12	N-2	1	400	N/A	4	4	4	4	3.7	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Part of a linear feature of 8 Beech trees acting as a hedge row, branches encroaching over boundary line and building.
T6	Common Beech	Fagus sylvatica	Mature	Yes	12	N-2	1	350	N/A	4	4	4	4	3.7	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Part of a linear feature of 8 Beech trees acting as a hedge row, branches encroaching over boundary line and building.
T7	Common Beech	Fagus sylvatica	Mature	Yes	12	N-2	1	400	N/A	4	4	4	4	3.7	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Part of a linear feature of 8 Beech trees acting as a hedge row, branches encroaching over boundary line and building.
T8	Common Beech	Fagus sylvatica	Mature	Yes	12	N-2	1	400	N/A	4	4	4	4	3.7	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Part of a linear feature of 8 Beech trees acting as a hedge row, branches encroaching over boundary line and building.
T9	Common Beech	Fagus sylvatica	Mature	Yes	12	N-2	1	400	N/A	4	4	4	4	3.7	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Part of a linear feature of 8 Beech trees acting as a hedge row, branches encroaching over boundary line and building.
T10	Leyland Cypress	X Cupressocyparis leylandii	Semi-mature	Yes	7	N-2	1	150	N/A	2	2	2	2	3	Fair	Fair	Fair	C	10 to 20 yrs	2 Landscape Values	Fair	No remedial works required.	Situated offsite, part of an overgrown hedgerow feature.
T11	Copper Beech	Fagus sylvatica f. purpurea	Mature	Yes	11	N-4	1	210	N/A	3	3	3	3	4	Good	Good	Fair	A	>40 yrs	1 Arboricultural Values;2 Landscape Values	Good	No remedial works required.	Part of a linear feature of 4 Beech trees, mechanical damage noted.
T12	Copper Beech	Fagus sylvatica f. purpurea	Mature	Yes	11	N-4	1	400	N/A	3	3	3	3	4	Good	Good	Fair	A	>40 yrs	1 Arboricultural Values;2 Landscape Values	Good	No remedial works required.	Part of a linear feature of 4 Beech trees, mechanical damage noted.
T13	Copper Beech	Fagus sylvatica f. purpurea	Mature	Yes	11	N-4	1	190	N/A	3	3	3	3	4	Good	Good	Fair	A	>40 yrs	1 Arboricultural Values;2 Landscape Values	Good	No remedial works required.	Part of a linear feature of 4 Beech trees, mechanical damage noted.
T14	Copper Beech	Fagus sylvatica f. purpurea	Mature	Yes	11	N-4	1	210	N/A	3	3	3	3	4	Good	Good	Fair	A	>40 yrs	1 Arboricultural Values;2 Landscape Values	Good	No remedial works required.	Part of a linear feature of 4 Beech trees, mechanical damage noted.
T15	Black Poplar	Populus nigra var betulifolia	Mature	Yes	14	E-3	1	750	N/A	6	6	6	6	4	Good	Ivy	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Crown reduction to ease enroachment upon building.	Situated offsite within the school grounds, unable to inspect stem or base due to being offsite, compaction around base, branches encroaching building.
T16	Scots Pine	Pinus sylvestris	Mature	Yes	10	NE-6	1	250	N/A	2	2	1	2	6	Poor	Poor	Fair	C	10 to 20 yrs	2 Landscape Values;1 Arboricultural Values	Poor	No remedial works required.	Broken branches in crown, mechanical damage, leaning northeast towards house.
T17	Common Beech	Fagus sylvatica	Mature	Yes	10	N-1	1	300	N/A	3	3	3	3	1	Good	Good	Fair	A	>40 yrs	1 Arboricultural Values;2 Landscape Values	Good	No remedial works required.	Part of a linear feature of trees situated on the school grounds.
T18	Black Poplar	Populus nigra var betulifolia	Mature	Yes	14	SE-3	1	600	N/A	5	5	5	5	3	Good	Good	Fair	A	>40 yrs	1 Arboricultural Values;2 Landscape Values	Good	No remedial works required.	Situated offsite within the school grounds, unable to inspect stem or base due to being offsite, compaction around base, mechanical damage noted.
T19	Common Quince	Cydonia oblonga	Young	Yes	4	N-1	1	90	N/A	2	2	2	2	1	Good	Good	Fair	B	20 to 40 yrs	2 Landscape Values	Good	No remedial works required.	Part of a linear group of trees.

Tree ID	Common Name	Latin Name	Maturity	Measurements Estimated	Height (m)	Height and direction of first significant branch (m)	Number of Stems	Diameter at Breast Height	Stem 2 (mm)	Spread - N (m)	Spread - E (m)	Spread - S (m)	Spread - W (m)	Canopy Height (m)	Crown Condition	Stem Condition	Basal Condition	Category	Life Expectancy	Subcategories	Phys Condition	Management Recommendations	Comment
T20	Black Poplar	Populus nigra var betulifolia	Mature	Yes	14	NE-3	1	550	N/A	3	3	3	3	2	Fair	Ivy	Fair	B	10 to 20 yrs	1 Arboricultural Values;2 Landscape Values	Fair	Remove ivy.	Situated offsite within the school grounds, unable to inspect stem or base due to being offsite, compaction around base, mechanical damage noted, starting to lean in towards the house (NE), sever ivy around base.
T21	Black Poplar	Populus nigra var betulifolia	Mature	Yes	14	E-3	1	450	N/A	4	4	4	4	4	Good	Fair	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	No remedial works required.	Situated offsite within the school grounds, unable to inspect stem or base due to being offsite, compaction around base, it appears that branches have snapped out in the past on one side, small cavity in stem.
T22	Black Poplar	Populus nigra var betulifolia	Mature	Yes	14	E-3	1	530	N/A	4	4	4	4	4	Good	Good	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	No remedial works required.	Situated offsite with the school grounds, unable to inspect stem or base due to being offsite, compaction around base.
T23	Black Poplar	Populus nigra var betulifolia	Mature	Yes	14	NE-3	1	600	N/A	4	4	4	4	4	Good	Ivy	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Remove ivy.	Situated offsite within the school grounds, unable to inspect stem or base due to being offsite, compaction around base, leaning northeast, sever ivy on stem.
T24	Black Poplar	Populus nigra var betulifolia	Mature	Yes	14	NE-4	1	600	N/A	4	4	4	4	4	Good	Ivy	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Remove ivy.	Situated offsite within the school grounds, unable to inspect stem or base due to being offsite, compaction around base, leaning northeast, sever ivy on stem.
T25	Black Poplar	Populus nigra var betulifolia	Mature	Yes	14	NE-4	3	600	400	5	5	5	5	4	Good	Ivy	Fair	B	20 to 40 yrs	1 Arboricultural Values;2 Landscape Values	Good	Remove ivy.	Situated offsite within the school grounds, unable to inspect stem or base due to being offsite, compaction around base, leaning west, sever ivy on stem.
T26	Silver Birch	Betula pendula	Semi-mature	No	5	NE,1	2	130	78	3	3	3	3	2	Good	Good	Good	A	>40 yrs	2 Landscape Values	Good	No remedial works required.	Situated on the driveway within a raised bed.
T27	Wild Cherry	Prunus avium	Semi-mature	No	4	N-1	1	190	N/A	3	3	3	3	1	Fair	Fair	Fair	B	20 to 40 yrs	2 Landscape Values	Fair	No remedial works required.	Growing within a hard surface area, situated on a raised bed, mechanical damage, bark wounding.

Tree ID	Common Name	Latin Name	Maturity	Height (m)	Crown Condition	Stem Condition	Basal Condition	Category	Life Expectancy	Subcategories	Phys Condition	Management Recommendations	Comment
H1	Leyland cypress	× Cuprocyparis leylandii	Young	3	Good	Good	Good	A	>40 yrs	2 Landscape Values	Good	No remedial works required.	Boundary feature. Good form.
H2	Leyland cypress	× Cuprocyparis leylandii	Young	3	Good	Good	Good	A	>40 yrs	2 Landscape Values	Good	No remedial works required.	Boundary feature. Good form.
H3	Leyland cypress	× Cuprocyparis leylandii	Semi-mature	3	Good	Good	Good	B	20 to 40 yrs	2 Landscape Values	Good	No remedial works required.	Hedgerow running along driveway

Arboricultural Data Tables Terms.

Tree Id	Reference no. T1, T2 etc. for trees; H for hedgerows; G for Groups and W for woodlands.
Tag Number	If the tree has been tagged with an 'arbo' tag then the physical tag number is listed in this column.
TPO Number	If the tree is subject to a TPO and it is known to us this will be recorded here.
In Conservation Area	Y/N - If the tree is located within a Conservation Area we may confirm that here.
Tree Type	Beech, Oak etc.
Common Name	Common Beech, Evergreen Oak etc.
Latin Name	Fagus sylvatica; Quercus robur - latin names.
Maturity	The estimated age class of the tree (relative to species) o Y - Young o SM - Semi-mature o EM - Early-mature o M - Mature o OM - Over-mature or V - Veteran
Potential for Bat Habitat	Y/N - if the tree has cracks, cavities or suitable bat habitat it may require further ecological surveys and form a constraint on development.
Measurements Estimated (Y/N)	Y/N - if the tree is off site, covered with ivy, or some other restriction the british Standard allows for measurements to be estimated.
Height	Height of the tree in meters.
Height & Direction of 1st Significant Branch	Recorded to consider access.
Number of Stems	Number of clear stems.
Diameter at Breast Height	Diameter of stem (mm) at breast height (1.5 metres above ground).
Crown Spread	The maximum spread of the trees canopy measured from the stem in four directions (North, East, South, West).
Canopy Height	The height between ground level and the lowest part of the canopy when considering access.
Crown / stem / Basal Condition	Goof, Fair, Poor condition comments.
Category	Tree categorisation based on section 4.5 of BS 5837 (2012) Trees in relation to design, demolition and construction – Recommendations. Four categories are used (A, B, C, U) with categories A, B & C being assigned one of three separate sub categories (1, 2 or 3): A – Trees of high quality with an estimated remaining life expectancy of at least 40 years. B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. C – Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
Life Expectancy	Estimated safe, usable life expectancy.

Sub-Category	Subcategories: 1: Mainly arboricultural & aesthetic qualities 2: Mainly landscape qualities 3: Mainly cultural values, including conservation U – Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years
Physical Condition	Goof, Fair, Poor condition considering the tree structure, form and vitality.
Management Recommendations	Recommendations (regardless of the development proposals if available) for removal, retention and/or remedial arboricultural works.
Comments	A brief description of the tree which refers to tree form, condition, health and significant defects. Comments regarding environmental conditions affecting the tree (e.g. ground conditions) will also be included where relevant.

Arboricultural data tables are essentially an asset register of the trees and tree cover on and adjacent to a development site. The information included within the tables is used to produce a tree constraints plan (TCP) which shows in 2D the constraints and opportunities on a particular site.

T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
T13
T14
T15
T16
T17
T18
T19
T20
T21
T22
T23
T24
T25
T26
T27
H1
H2
H3
6
7

Crown Spread

Root Protection Area

Category 'A'

Category 'B'

Category 'C'

Category 'U'

0

25m

ROAVR ENVIRONMENTAL

Tree Constraints Plan

Mark Lawrie	**6 Chantry Walk CH60 8PX**

SCALE : 1 : 300 @ A3	DATE : 11/06/2021	N
MAP FILENAME : 21_5837_06_15_TCP_V1	Version: v1	Checked by: MH

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